**Appeal - 21 00790 AS Land Between Woodchurch Road and Appledore Road Tenterden.**
**Planning Inspectorate Ref.: APP/E2205/W/21/3284479**

**Rebuttal Proof by Phillip Cook – Tree Officer Ashford Borough Council**

**Response to SJA Trees Proof of Evidence – January 2022**

Outline application for the development of up to 145 residential dwellings (50% affordable) including the creation of access points from Appledore Road (1 x all modes and 1 x emergency, pedestrian and cycle only), and Woodchurch Road (pedestrian and cycle only), and creation of a network of roads, footways, and cycleways through the site. Provision of open space including children's play areas, community orchards, sustainable urban drainage systems, landscape buffers and green links all on 12.35 ha of the site. (Save for access, matters of appearance, landscaping, layout & scale reserved for consideration') b) Full planning permission for the change of land use from agricultural land to land to be used as a country park (8.66 ha), and land to be used as formal sports pitches (3.33 ha), together with pavilion to serve the proposal and the surrounding area. Including accesses, ancillary parking, pathways, sustainable urban drainage systems and associated landscaping.

1. I have prepared this Proof Rebuttal to address some specific issues raised on behalf of the appellant by SJA Trees in their Proof of Evidence (CD/5.7)7.10)

   T43 Horse Chestnut
   - History (4.2  SJA PoE ref in brackets and throughout text)
   - Life expectancy (4.4)
   - Visibility and contribution to arboricultural character of Appledore Road (4.5)
   - Arboricultural impacts of alternative locations for the site access (4.6)
   - Mitigation (4.7)

   T381 Field Maple
   - Recent history (5.3)
   - Root Protection area (5.4)
   - Buffer zone (5.5)
   - Soil and root analysis trial pits (5.6)
   - Root spread, depth and density: Ground Radar (5.7)
   - Conclusions regarding root spread and density (5.8)
   - Impact of the construction of the proposed sports pitch on T381 (5.9)
   - Impact of proposed use of proposed sports pitch (5.10)

2. The reasons for preparing this rebuttal are that I consider that the above issues in terms of the SJA evidence are at variance with my own views and evidence.  In addition the interpretation of CD/5.7 and CD/5.8 has underpinned their approach and I do not believe that this is a correct approach.

**The removal of T43 Horse Chestnut.**

**History (4.2)**

3. As stated in the SJA PoE (CD/7.10, 4.2.10) …"Many of the trees appear to be reaching the end of their safe life" is a broad statement that implies that many trees will be lost quite soon – this is not the case. Over the last thirty years, a mean of just one tree has been lost every three years. KCC Highways as the owner have an inspection regime and will manage the trees appropriately for their context. Whilst the trees are mature, there is no reason why a great many of them may not have a safe life in excess of 40 years – no-one can predict exactly what longevity the trees possess.
   Specifically, in terms of Horse Chestnuts T111 and T142 (SJA Avenue tree survey schedule PoE Appendix 3), they are not liable to wind-throw and the implications of the fungus Pleurotus ostreatus has been incorrectly assessed by SJA Trees. The Body Language of Trees by C Mattheck, K Bethge & K Weber – Encyclopedia of Visual Tree Assessment (2015), page 476, (see Appendix 1) describes Pleurotus in terms of its decay location and significance as follows:

   Type of rot: White rot (simultaneous rot);
   Rot Site: Trunk, strong branches;
   Wood alteration: wood embrittlement;
   Consequence: brittle fracture.

   In my experience of managing the Ashford Borough Council tree stock for ten years, Pleurotus is largely progressive, and if assessed in terms of its pattern within a tree, remedial works can greatly extend a tree's life. Lonsdale (1999 – reprinted 2013, Principles of Tree Hazard Assessment and Management) notes on page 133 that the area of decay can be localised to the initial entry point of the fungi.

   By contrast, Ganoderma resinaceum (page 440, C Mattheck, K Bethge & K Weber 2015) is listed with the attributes that SJA Trees appear to ascribe to Pleurotus in terms of the ductile fracture and wind-throw after root fracture. This evidence shows that in their two example trees (T111 & T142), SJA Trees may have not interpreted the significance of the fungi as described in a well-respected text.

4. SJA examine in paragraph 4.2.11 the pairings and the gaps between the trees, notably it clearly states that …"apart from Pairs 1, 2 and 3, none of the other pairs are fully absent abut others that are fully absent". Thus, visual continuity is still fully appreciable and that is even supported by the SJA assessment in that pair gaps are not prevalent throughout the avenue, and are very locally geographically located to the eastern end of the avenue in what is, unsurprisingly, the most urban section of the feature.

5. Within 4.2.13, the replanting is examined in relation to the 35 trees of 84 that have been removed – it is pertinent to point out in very base mathematical percentage terms that only 29.4% of the mature trees have been removed in the avenue's 130 year history. That is to say, <u>including T43 that over 70% of the original avenue remains</u>. In terms of the planting whilst a proportion are located in between original planting positions some are on original avenue tree locations and could be deemed replanting. Furthermore, good proportion are Lime (11 of 21) thus giving a backbone of species continuity. It should be noted that current tree planting good practice actively encourages a range of species in order to

provide some resilience in terms of pest and pathogens - KCC would appeared to have somewhat embraced this approach.

6. As a counterpoint to the inference that the trees are not replants and the avenue has been in decline from both loss of trees and the planting, it could be equally applicable that perhaps KCC have not sought to directly replant owing to the fact that they consider that the avenue retains its cohesive nature even with the missing pairs as over 70% of the original trees remain.

**Life expectancy (4.4)**

7. In terms of the longevity of the tree, the SJA Trees prognosis of forty to fifty years as outlined in 4.47, is that the tree is …"likely succumb sooner than that" but that it is …"of normal vitality" and that there is no indication that would at this time suggest a shortened lifespan. This assessment is the view of SJA Trees, but in my view, supposition on the longevity of the tree without any clear evidence of anything that is likely to shorten its life, is of little assistance.

**Visibility and contribution to arboricultural character of Appledore Road (4.5)**

8. Within this section of CD/7.10 there is a further new analysis made concerning the height of T43, the height of the surrounding trees and whether it is visible within the context of the surrounding trees from various viewpoints. Whilst the analysis may seek to present that the tree does not have an individual presence, it does not accord with the representation of T43 within document CD/4.15, and in particular Photo 1 which is reproduced for convenience below. Photograph #3 (5.2.25) within CD/1.13A similarly supports the prominent nature of T43 in the longer distance view (in a winter setting) despite being referenced to a contrary point of view. Both photographs show the distinguishable form of the tree in the prominent position on the outside of the corner, furthermore, as a local landscape component, especially in the context of ALP 2030 Policy ENV3a (CD/2.1) it provides considerable contribution to the 'pattern and composition' of trees in the avenue setting.

9. Paragraphs 232 of Jeremey Smith's Landscape and Visual Matters PoE (CD/7.8) concludes that the loss of T43 would be "noticeable" but would not change the "overall balance and character of these views" for someone arriving or leaving the settlement. In my view, with the erosion of the character by the removal of a key tree in this section of the avenue, the balance would be tipped from one of good avenue cohesion to a more fragmented pattern. David Withycombe in para 6.5 of his PoE (CD/7.18) arrives at the same conclusion as to the wider impact of the removal of T43 in that it would "erode the avenue character. Furthermore, the JS, CD1.12 Part B, viewpoint 12 (Appendix 4), gives an indication of the true scale of aperture that would be created with the loss of the T43 and, accordingly, its significant impact on the cohesion of the avenue.

**Arboricultural impacts of alternative locations for the site (4.6)**

10. The four options outlined by SJA in section 4.6 show the process behind the choice of the access road, this has not been provided previously but does not alter the impact of the removal of T43 as being the option of least harm, but still harmful in terms of the cohesive nature of the avenue and the loss of a good quality individual tree.

**Mitigation (4.7)**

11. The potenial to plant 34 trees as a mitigation for the removal of T43, cannot offset the loss of a mature tree and all of the accrued benefits of its arboricultural goods. Any mitigation planting will require a significant period before maturation will provide the benefits of a fully mature tree.

12. Mitigation formed of a proposal to plant 34 or 36 trees has been advanced in both Section 3.8 (CD/7.8) JS PoE and the SJA PoE (CD/7.10) Paras 4.73 – 4.76. It should be noted that no approach to KCC Highways has been made to assess the feasibility of this proposal which has been confirmed in an email dated 25th January 2022 from Aubrey Furner to Phil Cook (Appendix 5). As a result, the certainty of delivery in relation to the mitigation planting is an unknown owing to the constraints of service runs and suitable planting spaces within the avenue. Thus, in terms of whether the CAVAT sum may be fully spent in this way it has not been reliably established.

13. Whilst significant attention has been given to this potential, I note that the research has not been undertaken by the appellant to determine exactly what may be deliverable in support of their proposal.

14. There appears to be an inconsistency within the PoEs of (CD/7.8) JS Section 3.8 Para 142 and SJA Para 4.7.5 (CD/7.10) relating to the terms of reference for the mitigation planting. The LVA describes the 35 missing trees *plus* T43 in terms of reinstatement whilst SJA describe 34 trees as the potential quantum of planting. This appears to reflect a lack of cogency in what it is being suggested might be possible.

**The construction of a sports pitch adjacent to T381 Field Maple**

**Recent history (5.3)**

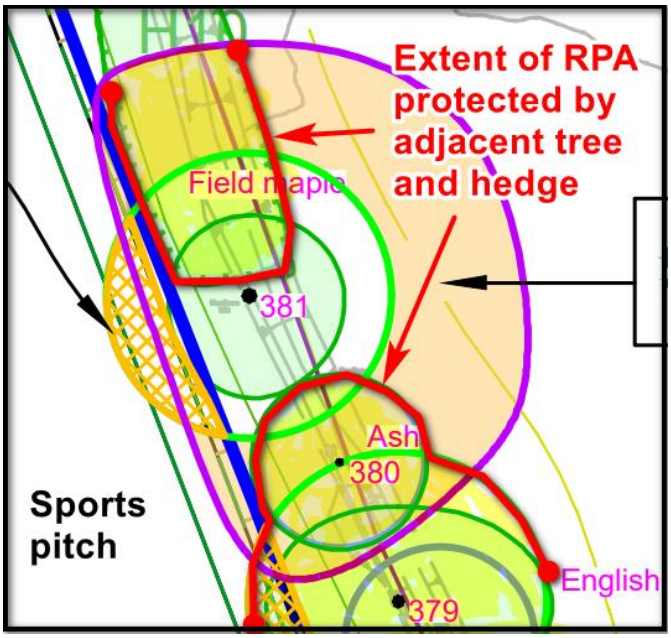
15. The coppiced stump of T381 is part of the above ground part of a tree and would have possessed all of the dormant buds that now form the bulk of T381. This is the same tree

that formed part of a managed hedge for many years but at some point in its life attained a stem diameter of 810mm which would have supported a good size mature tree.
The still extant tree, is one described by SJA trees in the Tree Survey section of CD/1.13A as an …"essential component of the group within which it stands; of ecological, cultural and historic value, of high quality and moderate landscape value; of long-term potential".

**Root protection area (5.4)**

16. Whilst BS5838:2012 (CD/5.7) provides the recommendations for assessing appropriate RPA's in size, offsetting and incursion, the interpretation should be proportionate in relation to the subject tree or trees. In the case of an Ancient tree, as supported by NPPF para 180 (c), it is important that BS5837:2012 is interpreted at the precautionary end of the spectrum of what should be proposed in developmental terms adjacent to such a tree. The justification by SJA Trees does not recognise an approach that gives sufficient weight to the ancient status of the tree.

17. The case for offsetting the RPA of T381 does not try to maximise the benefit for T381, as much of the offset area within the 'beneficial' habitat adjacent to the hedge is already an RPA for the hedge and adjacent trees. As will be shown in section 5.8, the roots of T381 extend beyond the 9m radius of a circular RPA into the west aspect (within the proposed pitch) and the core hedge line habitat is almost entirely protected by the adjacent RPAs. Drawing 1 below demonstrates the significant section of the hedge line that is covered by RPAs of other trees. The protection of as much of the rooting morphology as possible should be the principal driver in justifying any offsetting (or not) of a RPA and in this case a circular RPA is in the best interests of the tree's continued existence especially when supplemented with a Buffer Zone.




Drawing 1. The RPAs that surround T381 in the hedge line habitat.

**Buffer Zone (5.5)**

18. The purpose of a Buffer Zone (CD/5.8) is to provide a separation between the development activity and the ancient tree or woodland. Accordingly, this may serve the purpose of effectively protecting all of the rooting morphology including where rooting density is very

low. It is this ‘buffer’ that tries to ensure that no harm will come to the tree or even anywhere near the tree.

19. Contrary to as suggested by the SJA PoE (CD/7.10 para 5.5.6) it is not referenced that the shape may be amended as the word ‘should’, through definition, implies obligation in terms of the ‘*Buffer Zone should be at least 15 times larger than the diameter of the tree’.*

20. In section 5.5.10 SJA draw attention to the scope that may be applied to the Buffer Zone, this is accepted but not in the context of reshaping as ‘scale, type and impact’ are the parameters, and then logically only upward from the ‘15 times the diameter’ baseline as the reduction is not referenced within CD/5.8.

**Soil and root analysis trial pits (5.6)**

21. The data as supplied is welcomed but it should be noted that within trial pits 12 and 15 roots are still being encountered at 12m distance from which approximately represents the extremity of the buffer zone.

**Root spread, depth and density: Ground Radar (5.7)**

22. The data as supplied is welcome and provides the basis for discussion in 5.8.

**Conclusions regarding root spread and density (5.8)**

23. The morphology of the roots is of higher density along and closer to the hedgerow, but it should be noted that roots do extend out to beyond 12 metres from the stem of the tree. In the context of a Buffer Zone provided to ensure that there is a sufficient separation between the development and the Ancient tree, the morphology upholds the need to retain a circular 12m Buffer in order to create a ‘minimum root protection area’ (CD/5.8).

**Impact of the construction of the proposed sports pitch on T381 (5.9)**

24. As stated in CD/7.10 para 5.9.2/3 the incursion values within the RPA and Buffer Zone are predicated on the morphing of both areas, the values for a correctly circular 12m Buffer Zone will be considerably greater and instead of what should be ‘semi-natural habitat’ (CD/5.8) a sports pitch would be imposed.

**Impact of proposed use of proposed sports pitch (5.10)**

25. I refer to my PoE section 9.9 (CD7.19) in which is highlighted the intensity of use and maintenance. The impact of low intensity grazing is not in the same order as a regularly used and maintained sports pitch, there are significant inputs and mechanised maintenance operations to keep a pitch in good playable condition.

# Appendices

**Appendix 1.** . The Body Language of Trees by C Mattheck, K Bethge & K Weber – Encyclopedia of Visual Tree Assessment (2015), page 476

**PLEUROTUS OSTREATUS**
**(COMMON OYSTER MUSHROOM)**

**Mode of life:** On living and dead trees (parasitic and saprobic).

**Type of rot:** White rot (simultaneous rot).

**Rot site:** Trunk, strong branches.

**Hosts:** Broadleaved trees, less frequently coniferous trees.

**Fruit body:** Annual, shell-shaped, up to 20 cm wide with lateral stem, top side cream-coloured or blueish grey to olive green, underside white to cream-coloured gills extending down the side stem, white to violet spore powder. Formation of new fruit bodies: October – December.

**Peculiarities:** Fruit bodies tolerate low temperatures and can withstand frost (winter fungus).

**Wood alteration:** Wood embrittlement.

**Consequence:** Brittle fracture.

**Detailed examination:** Increment borer and Fractometer, drilling resistance reduction and/or spiral drill in case of advanced decay.

476

**Appendix 2.** The Body Language of Trees by C Mattheck, K Bethge & K Weber – Encyclopedia of Visual Tree Assessment (2015), page 440.

**GANODERMA RESINACEUM**
**(LACQUERED BRACKET)**

**Mode of life:** On living (parasitic) and dead trees (saprobic).

**Type of rot:** White rot (preferential lignin decomposition).

**Rot site:** Stem base, roots, less frequently high up in the trunk.

**Hosts:** Broadleaved trees, especially oak.

**Fruit body:** Annual, brackets up to 35 cm wide with copper red-violet or reddish brown top side with wavy zones, dry with dull wax surface, bright yellow wax layer often with small cracks, yellowish colour under the crust, bulgy white to orange-coloured increment margin, cinnamon-coloured to reddish brown cap flesh, underside with fine pores, brown spore powder.

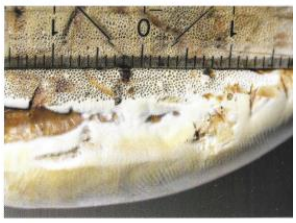
**Peculiarities:** Bright yellow wax layer on upper side of cap which partly cracks and easily splits off. Brackets relatively lightweight, sometimes with small stalk, containing "sap" which solidifies into "resin" soon after discharge. [52].

**Wood alteration:** Wood softening.

**Consequence:** Ductile fracture, windthrow after root fracture.

**Detailed examination:** Increment borer and Fractometer, spiral drill in cases of advanced decay, drilling resistance reduction in cases of advanced decay, sound velocity measurement, root excavation.

440



**Appendix 3.** Lonsdale (1999 – reprinted 2013, Principles of Tree Hazard Assessment and Management) Page 133.



*Plate 91* Pleurotus ostreatus *on dead stem of* Fagus sylvatica

***Pleurotus ostreatus*; oyster mushroom** (Plate 91)

• *Hosts*

This fungus is common on a wide range of broadleaved hosts, including *Fagus*, *Aesculus* and *Populus*.

• *Fruit bodies*

The fruit body, is a **soft, fleshy, fan-** or **shell-shaped pileus**, up to **150 mm** across and up to **25 mm** thick. It is sometimes borne laterally on a stem, 2 – 4 cm long. When developing, the upper surface of the cap is a very dark bluish grey, maturing to a pale greyish-brown or fawn colour, sometimes with the formation of cracks in the cuticle. With age, a yellowish colour develops. The underside consists of **white gills**, which run down to the base, where they tend to join together. (Despite the presence of gills, rather than pores, this fungus belongs taxonomically among the pore-bearing basidiomycetes.) The flesh, which is edible, is white and soft in the young fruit body and becomes firm on drying. The fruit bodies are non-persistent and are formed mainly in **late autumn and winter**, but also at other times throughout the year.



• *Decay*

In the early stages, delignification occurs preferentially in the spring wood, with relatively little effect on the middle lamellae between the fibres and in the xylem rays [93]. In *Populus*, a marked cracking across the grain develops at a stage when the wood remains generally firm, perhaps because the rays are easily degraded in this genus. In the advanced stages of decay, an intense white-rot with a flaky consistency is produced throughout. A dark brown discoloration is observed at the boundary between decayed wood and living sapwood.

• *Significance*

Severely decayed wood has relatively little strength, owing to the rapid degradation of both lignin and cellulose, with the corresponding loss of both compressive and tensile strength. The nature of strength loss in the earlier stages of decay has not been documented. If extensive areas of a branch or trunk become decayed, breakage is likely. However, as in the case of *Polyporus squamosus*, the decay seems sometimes to be localised within the part of the trunk or branch cross-section which was damaged by the initial event (e.g. branch breakage, vehicular impacts or lopping) which allowed the decay to develop.

*Plate 92* Polyporus squamosus *on* Ulmus *sp.*

*Plate 93* Polyporus squamosus*; decay in stem of* Ulmus

***Polyporus squamosus*; dryad's saddle, scaly polypore** (Plates 92–93)

• *Hosts*

This fungus occurs on several genera of broadleaved trees, including *Acer* (especially *A. pseudoplatanus*), *Fagus*, *Ulmus*, *Fraxinus* and *Tilia*.

**Appendix 4.** Landscape and Visual Assessment CD/1.12 Part B, Viewpoint 12.

**Appendix 5.** Email dated 25th January 2022 from Aubrey Furner (KCC HS) to Phil Cook (ABC)

Reply | Reply All | Forward | IM

Aubrey.Furner@kent.gov.uk | Phil Cook; Matthew.Gallagher@kent.gov.uk; Matt Hogben | 11:52

**Appledore Road, Tenterden**

This is the most recent version, but you made changes to another copy. Click here to see the other versions.
You forwarded this message on 25/01/2022 12:01.

Good morning Phil,

I am able to advise as follows:

'We do not allow third parties to undertake tree planting in the highway irrespective of who they are (developers, parish councils, city councils, district councils, residents, or members of the public etc). However , we do work with groups who are interested in planting highway trees to see how we can facilitate their aims within the constraints of the highway and our own specifications .

Furthermore, neither the applicant nor their representatives in this case have contacted us (highways) with their proposals for planting along Appledore Road, Tenterden. Whether or not 34 trees can be planted is the subject of debate.

We have this road on our scheduled planting programme and the reason for this is, is the enhancement of green infrastructure. However, as yet we have not investigated how many trees can be planted as we need to look at underground/overhead services before undertaking an on-site CAT scan. This will give us the potential planting locations of the new trees. The species of tree will then be selected. It is only at this stage that we will know how many trees can be planted along this section of road.

With regards to the size of trees to be planted, we find that 12 to 14 cm girth trees provides sufficient landscape impact when they are planted. The added advantage of using this size of tree is that they establish quicker and do not require as much intensive aftercare maintenance such as watering in the following years.'

Kind regards
Aubrey

**Aubrey Furner** MICFor, F Arbor A, CLGI | Arboriculture Manager | Highways & Transportation, Aylesford Highway Depot, St Michaels Close, Aylesford, Kent, ME20 7BU |External (Contact centre): 03000 41 81 81 | www.kent.gov.uk| Follow us on Twitter@kent_cc